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# China, Peoples Republic of Solid Wood Products China's Sixth Forest Resource Inventory Report 2005

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### **Report Highlights:**

On January 18, 2005, China's State Forestry Administration (SFA) released its report of the Sixth National Forest Resource Inventory (1999-2003) at the press conference sponsored by the State Council Information. China's forested area reaches 175 million of hectares, and the forest coverage increased from 16.55 percent to 18.21 percent. Chinese government officials confidently expressed that China's domestic timber production could meet its demand. FAS/Beijing, however, believes China will continue to have to rely on imports.

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#### Introduction

China releases its National Forest Resource Inventory Report every five years. On January 18, 2005, China's State Forestry Administration (SFA) released the Sixth National Forest Resource Inventory Report at the press conference sponsored by the State Council Information<sup>1</sup>. The Report covers the period 1999 through 2003. Mr. Lei Jiafu, Deputy Head of SFA, together with two other SFA senior officials, attended the news conference. Mr. Lei gave on overview of the Report's key findings and answered questions from the media.

# **Executive Summary**

The report concluded that China's forested area covers 175 million hectares (158 million hectares in 1998) with the forest stocking volume at 12,456 million cubic meters (11,567 million cubic meters in 1998). The forest coverage increased to 18.21 percent of the country's total land area from 16.55 percent in 1998.

Forest type	Area	Stocking Volume
- 1	(Million hectares)	(Million cubic meters)
Coniferous forest	71.94	6,794
Deciduous forest	72.79	5,662
Natural forest	115.76	10,593
Plantation	53.26	1,505

The percentage of coniferous forest, deciduous forest, and mixed forest is 47:50:3. The annual average growth of forest stand is 3.55 m3/hectare; the average degree of closure (the ratio between the vertical projection area of the forest canopy and the area of the forest land) is 0.54; the average diameter is 13.8 cm. According to the report, China's forests are healthy:

Presence of Pests and Diseases	% of Forest
Free of pests and diseases	80.0%
Low pest and disease presence	17.0%
Intermediate	2.5%
Heavy presence	0.5%

#### Structure of China's forest resources

1. Ownership structure (forest ownership, not forestland, not including Taiwan, Hong Kong and Macao)

Ownership structure	Area (million hectares)	Percentage
State-owned	72.85	42%
Collective-owned	64.84	38%
Individual-owned	35.10	20%
Total	172.79	100%

2. Type structure of the forest stand

Forest Type	Area	Stocking
	(Million hectares)	Volume

<sup>&</sup>lt;sup>1</sup> For a summary of the news conference, see <a href="http://www.xinhuanet.com/zhibo/20050118a/wz.htm">http://www.xinhuanet.com/zhibo/20050118a/wz.htm</a> This and "China Forest Resources" – published by SFA in January 2005, are the primary sources for this GAIN report.

		(Million cubic	
		meters)	
Timber forest	78.63	5,513	
Protective forest	54.75	5,501	
Fuel forest	303	56	
Special purpose forest	638	1,028	
Total	142.79	12,098	

# 3. Age class structure of the forest stand

Age Class	Area	Stocking Volume
	(Million hectares)	(Million cubic meters)
Young forest	47.24	1,285
Middle-aged forest	49.64	3,426
Near-mature forest	19.99	2,245
Mature forest	17.15	3,017
Over-mature forest	8.77	2,125
Total	142.79	12,098

#### 4. Species structure

Oak, Masson pine, Chinese fir, Birch and Larch are the dominant species of China's forest. Together they cover 71.31 million hectares, or about 50 percent of the total forested area.

#### 5. Distribution structure

Region	Area	Stocking Volume
_	(Million hectares)	(Million cubic meters)
Northeast Inner Mongolia Forest Region	37.78	3,156
Southwest Mountainous Forest Region	39.11	4,913
Southeast Low Mountain and Hilly	53.58	203
Forest Region		
Northwest Mountainous Forest Region	4.79	490
Tropics Forest Region	10.30	903
Total	145.56	11,565

# New developments since last Report (1994-1998)

- The forested area has continued to increase.
- The stocking volume increased steadily. The annual growth exceeds that harvested by 178 million cubic meters.
- Forest quality improved. The number of trees per hectare has increased by 72; the trees grow more rapidly; the mixed coniferous and deciduous forest increased three percentage points; the age structure and species structure also changed positively.
- The types the forest is more diverse. The protective forest and special-purpose forest increased 21 percent, which indicates that the forest development strategy initiated in 2003 that highlighted ecological improvement has started to payoff.
- Forest ownership and the investment structure have become more diverse. Individual-owned forest amounts to 20 percent of the total forest area by the end of 2003. China encourages forest development of all kinds of ownership. China launched the policy "who plants is who owns, who invests is who benefits." Whoever plants trees owns them. (Title to the land, however, remains with the State.) Different forest owners enjoy the same preferable policies. For example, China launched the forestry ecological benefit compensation system. It pays both individual-

- owned forests and state-owned forests the same benefit -- five yuan<sup>2</sup> each year per Chinese mu<sup>3</sup> (approximately US\$8.65/Ha).
- The development of the China's forest industry has great potential. Young and middleage forests amount to 68 percent of the total forest stand, which insures the sustainable development of the forestry industry.

#### China is able to meet its own timber demand

At the press conference, Chinese officials confidently stated that China's existing reserves of commercial forests, including fast-growing-high-yielding (FGHY) forests, will be sufficient to meet its demand. SFA based this conclusion on the following factors: 1) The annual growth of the standing volume (500 million cubic meters) exceeds the annual wood consumption (365 million cubic meters), meaning consumption is about 70 percent of the growth; 2) By 2010, about 3 billion cubic meters of reserved forests will become mature forests available to be logged; and, 3) Since 2001, when China launched FGHY timber forest project, the area covered by FGHY timber forests has reached 3.7 million mu (250,000 hectares)<sup>4</sup> at the end of 2003. By 2015, the FGHY forests will reach 13 million hectares, which can supply about 130 million cubic meters timber.

## Challenges Remain

Chinese officials also pointed out that there were still a lot of problems on China's forest industry.

- Poor forest resources: China's forest coverage 18.21 percent is only 62 percent of the world average; forest per capita is 0.132 ha, less than one fourth of the world average.
- Unbalanced geographic distribution: Forest coverage in the East is 34.27 percent, in the Central region is 27.12 percent; in the West is 12.54 percent. Forest coverage in five Northwestern provinces is only 5.86 percent.
- Poor quality: Average stocking volume per ha is 84.73 cubic meters, only 84.86
  percent of the world average; average forest stand diameter is only 13.8 cm; single
  specie forest dominates China's forests.
- Excessive logging: Average annual excess logging reaches 75.54 million cubic meters.

### **FAS Comments**

Post believes that China will continue to import large amounts of wood in the coming years because of the following factors: 1) China's structural shortage for wood. The rapid development of China's furniture, interior decoration, flooring, and wood-based panel industries increases the demand for large diameter, high quality timber, which China cannot source domestically; 2) Post questions China's FGHY forest development target. China plans to 13 million hectares of FGHY forest by 2015, which means China needs to plant more than one million hectares of FGHY forest every year in the coming ten years. However, according to SFA's data, China planted 59,096 ha and 87,333 ha FGHY forest in key regions in 2003 and 2004 respectively.

Another important reason Post believes China's demand for forest products will exceed it current and future supply is China's consumption of paper products currently is low by world standards and is expected to increase rapidly in the years ahead. Several large international

<sup>&</sup>lt;sup>2</sup> 8.26 Yuan=US\$1.00

<sup>&</sup>lt;sup>3</sup> 1 Chinese mu = .0667 hectares or approximately 15 mu = 1 hectare

<sup>&</sup>lt;sup>4</sup> Another SFA official document said that the FGHY forest area totaled 1.75 million hectares at the end of 2003.

paper companies have invested heavily in building paper mills, which will need large volumes of forest products. Although some of these paper companies have planted FGHY forests, Post believes China's land shortage will preclude planting enough trees meet all their needs.